

# THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, SINCLAIR & MOORE, AND ROBERT SINCLAIR, JR.—EDITED BY E. P. ROBERTS.

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BALTIMORE, MD. MAY 10, 1836.

Vol. III

**THIS** publication is the successor of the late **AMERICAN FARMER**, and is published at the office, on the west side of Light, near Pratt street, at FIVE DOLLARS per annum, payable in advance. All subscribers who pay in advance, will be entitled to 50 cents worth of any kinds of seeds, which will be delivered, or sent, to their order.

## American Farmer Establishment.

BALTIMORE: TUESDAY, MAY 10, 1836.

### THE RUTA BAGA.

We insert in another column the very interesting communication of Mr. Thomas Bevan, to which we alluded in our last paper. Mr. Bevan is the manager of the beautiful estate of Mr. Richard Caton, situated nine miles from our city, called Brookland Woods, of which we gave a particular description last year. He is a practical and scientific farmer, having received the advantage of several year's instruction from that eminent Welch agriculturist, and cattle breeder, the Hon. Mr. David of Radyr, under whose tuition he had the best of all possible opportunities of obtaining a thorough knowledge of every branch of husbandry, and more especially of those which belong to the department of raising food for stock. We mention these facts, as being connected with the history of Mr. Bevan; because they go to establish, beyond all cavil, his claims to the reputation of an experienced agriculturist, and show the entire safety of following his lead. The culture of the Ruta Baga is a thing very much neglected in our country, and it is the more to be regretted, as it is the vegetable above all others best calculated to preserve stock in health and vigor through our long and piercing winters.

There is, however, one fact relative to the crop raised by Mr. Bevan, which he appears to have overlooked, and as it is important, we will mention it.

After the crop of Ruta Baga had done growing, a furrow was turned up on either side of the roots, which, thus protected, were permitted to remain in the open field, and continued sound until the middle of April. This is the most interesting incident in the history of the cultivation of this root, because it takes off a large portion of the objection heretofore raised against roots generally—the difficulty of keeping them over the winter. As the season for sowing the seed is near

at hand, we would particularly call the attention of farmers to the virtues of this root; and as an encouragement to their yielding faith in the belief of its virtues, we will state, that we were called upon some weeks since to inspect an aged Devon cow, which had been fattened at Brookland Woods on Ruta Baga with only the addition of three quarts of bran per day. She yielded near 70 lbs. of tallow. This for a cow rising sixteen years of age, was truly a remarkable result, and goes to show two material facts, most conclusively—the facility with which the Devon stock fatten, and the nutritious properties of the Ruta Baga.

### STEAMING OF CORN STALKS AS FOOD FOR CATTLE, &c.

The dreadful mortality from famine among the cattle to the eastward during the past winter, seems to call upon every one engaged in agricultural pursuits to fall upon some plan of economising the food destined for winter use. This course is alike dictated by interest and humanity, and will, we sincerely trust, receive all proper attention from those who are to be affected by it. With this brief introduction, we will state a simple fact, which will go far to show how much may be gained by adopting an enlightened system of feeding. During the past season, protracted, cold, and cheerless as it was, the large and beautiful herd of Devons at Brookland Woods, the seat of Mr. Richard Caton, near this city, were fed upon steamed corn stalks and Ruta Baga. This was not the result of scarcity, but a matter of choice, for the fine meadows belonging to the estate, yields ample supplies of the choicest timothy hay, and have been celebrated for years, for their great productiveness. The enlightened proprietor of this fine estate conceived the opinion that by submitting the corn stalks to the action of heat in the process of steaming, he would be able to restore to them much of that sugary property that renders the stalk in its young and green state, so much the favorite with the human palate, and that thus its nutritive powers would be brought into activity. The result of his winter's feeding has not only been highly gratifying to him as affording a most happy illustration of the justness of his views, but it has enabled him to get his stock through the winter in good and vigorous health and thriving condition, with a saving

of from 45 to 50 tons of timothy hay. After stating this fact, it may be considered as a matter of concern, to know how he prepares his stalks, and under that impression, we will briefly state the manner of his doing so. The stalks are first cut by a straw-cutter into the proper lengths, and are then steamed and fed to his stock. The process is as simple as can be desired, and costs but a few hours labor each day: and it should be borne in mind, that this labor is required to be performed mostly in the dead of winter, when, on all large estates at least, there are many hands idle, so that it is no additional tax whatever upon the proprietor of the farm by way of labor.

The cost of an apparatus for steaming food should deter no one. We have already described the one used by the Hon. Charles A. Barnitz, of York, Pa., the cheapness and efficacy of which has been so highly commended, and we will now describe that used by the Hon. Morgan Lewis of New York, formerly governor of that state—a gentleman whose ample means, enthusiastic devotion to the pursuits of husbandry and high attainments, are at least guaranties of the efficacy of his plan.

He has a kettle holding some forty or fifty gallons, which he has placed over a furnace. In this he boils clover hay, which is chopped, as well as most vegetables. Over the mouth of the kettle he places a hogshead, holding about 12 bushels, the bottom of which is perforated with a number of holes, made by a common sized auger. These allow the steam to pass through and cook the potatoes with which the hogshead is filled. The steam is kept in by a loose cover, which is placed on the top of the hogshead. By this means, while the articles in the pot are boiled, the potatoes in the hogshead above are cooked, without the least difficulty by the steam generated by the fire below.

The plan of cooking the potatoes separately from the other food, is performed by many of our best farmers; because the opinion is entertained by them that the liquor in which potatoes are boiled, contains deleterious qualities, particularly if the potatoes have lain exposed to the action of the sun and air, and acquired a greenish complexion.

## AN EXCELLENT EXAMPLE.

We republish the following circular, which we copy from that excellent paper, the New Castle Gazette, with the more pleasure, as it is calculated by the force of its example to do much good. The formation of agricultural societies, in the several counties of the respective states, is better calculated to advance and protect the interests of those engaged in agriculture than, perhaps, any other thing that could possibly occur. Besides concentrating opinion, it serves to keep alive a spirit of generous emulation and awaken a healthful thirst for improvement, both of which are much needed in every district and section of our country. We confess that in matters connected with husbandry we are impelled by impulses which border on enthusiasm, and we may, therefore, be expected to feel more than ordinary pleasure when we see efforts of the character of the present made in behalf of a branch of industry to which we are bound by every consideration which can enlist the sympathies of the human heart or animate the mind of man to exertion. May we ask of each and all of our readers to read this circular with attention, thoroughly digest the wholesome advice it inculcates, and practice upon the lessons of wisdom it would teach: and while we are thus asking this poor boon of those with whom our own interest is identified, may we ask them also, to stand forth as the friends of the most noble of all sciences, and use their influence to organize in each and every county in the United States a similar association to that which the citizens of New Castle county are, with so much patriotism, so much enlightened economy, and so much foresight and wisdom, about to form. It is a melancholy truth that there are several of the states in which no agricultural society exists, and can it longer be a matter of surprise that there should be so many worn-out fields? We should think not; for this simple fact, of itself, shows, that a most culpable apathy among agriculturists lies at the very foundation of the evil. We, therefore, rejoice, most heartily rejoice, at this evidence of a better feeling, and we trust that it may prove an epidemic in our country so catholic, so universal, in its influences as to visit every homestead and cottage in the land. And should it so extend, what a glorious incident will it be in the history of "Little Delaware," that her citizens had given new impulse and animation to an institution whose blessings are so competent to be diffused through every nerve and ligament of our wide and expanded territory! The results which it would achieve would be as replete with blessings to the

country at large, as were the deeds of arms of this gallant little sister brilliant during the period of our history when virtuous and iron-hearts periled all for liberty.

[From the New Castle Gazette.]

## AGRICULTURE.

The following circular is one of great importance to the people of this state—not only to agriculturists, but to the whole population. Hardly a week passes, but we hear of families "breaking up" and "going west." Something must be done or the lower part of the state will be depopulated, and we know of nothing that will tend more to stop this tide of emigration than the formation of such a society as is here intended. We hope our friends in the lower part of the state will interest themselves in this matter, and on the 7th day of May exhibit such an array of names as will surprise the projectors of the same. We wish each and every of our subscribers to consider this circular addressed to him, and govern himself accordingly.

*Circular addressed to the inhabitants of New-Castle county.*

The subscribers, citizens of this county, pledge themselves to support, by an annual contribution of five dollars, for the next five years, "The Agricultural Society of New Castle county," and invite your aid and co-operation in its establishment. The objects of the association are threefold, viz. AGRICULTURE, HORTICULTURE, and the rearing of SILK. The society will endeavour, by a laudable ambition and liberal premiums, to establish the best cultivation of the different soils of the county, so as to afford the greatest products at the least expense—to hold out inducements to Farmers to improve their lands, stocks of horses, cattle, sheep and swine; to encourage gardeners and nursery men, to bring into our markets most choice fruits, vegetables, plants and flowers;—and to favour by every means and information the silk-growing interests of the country.

A meeting of the members for organization, and the adoption of a constitution will take place on Saturday the 7th day of May, at the City Hall, Wilmington, at 10 o'clock, A. M. Any names added to this list you will please forward to that meeting.

The subscribers are—

James Canby  
John Clarke  
E. W. Moore  
W. R. Sellers  
Wm. Gibbons, M.D.  
Henry Latimer  
Joseph Witherill  
Wm. Chandler  
Richard Topham  
Justa Justis  
Anthony Biderman  
Henry Whiteley  
John Richardson  
W. P. Brobson  
N. G. Williamson  
Eli Hilles  
James A. Bayard  
John Price  
H. Gibbons, M. D.  
J. S. Naudain, M. D.

Charles Dupont  
R. H. Bayard  
James I. Brindley  
Thos. Merryweather  
Willard Hall  
J. P. Garesche  
Jas. Price  
Jos. T. Price  
Thos. Massey, jr.  
Allen McLane, M. D.  
Edward Tatnall  
Samuel Wollaston  
Samuel Canby  
Wm. Robinson  
John Platt  
Thos. J. Higgins  
George Griffin  
Washington Rice  
Edward Canby  
Enoch Roberts

Philip Reybold  
J. W. Thomson, M. D.  
Wm. Solomon  
A. S. Read  
Thomas Robinson  
Benj. Webb  
Samuel P. Johnson  
Thomas Garrett  
John Wales  
H. M. Bayard  
Thomas Stockton

Thos. Baldwin  
Jacob Canlk  
Jonathan Bonney  
James Webb  
Merritt Canby  
T. Robinson, N. C.  
Edward Grubb  
Wm. H. Jones  
H. F. Askew, M. D.  
John Gordon  
Enoch E. Camp.

## SKINLESS OATS.

To the Editor of the Farmer and Gardener:

Having seen several statements in the agricultural papers, detailing the results of experiments in the culture of the skinless oats, I am induced to submit the following for publication.

Last spring I obtained four quarts of these oats, which I sowed thinly on three separate pieces of ground, amounting in all to three eighths of an acre. One third of the land was in a low situation, on a stream, and on the day I intended to harvest the crop there was a heavy fall of rain, which entirely destroyed it. From this portion, therefore, I reaped nothing. From the remaining quarter of an acre I gathered five bushels, being at the rate of twenty bushels to the acre. The land however, though of good quality, was by no means occupied with the growth, as my object was rather to obtain the greatest possible product from the seed, than from the acre. The season was very dry from the time the oats came into flower until they were ripe, which naturally shortened the crop. The weight of the oats was about forty pounds per bushel.

Under favorable circumstances, I suppose, thirty or forty bushels may be grown on good land to the acre; but I regard it as next to impossible to reap sixty or eighty fold, which has been intimated by some persons. The value of this variety, in a threshed or ground state, compared with the common oats, is, measure for measure, about as two to one; and, divested as it is of the husk, it would be rather unreasonable to expect it to produce a greater number of bushels, or even as many, from a given quantity of land.

This spring I have had four bushels sown on as many acres, which will be an experiment on a sufficiently large scale to establish its probable productiveness with some precision. I will communicate the result when ascertained.

A FARMER.

Virginia, April 28.

## CULTURE OF THE RUTA BAGA:

To the Editor of the Farmer and Gardener:

In answer to your request concerning my method of raising *Ruta Baga*, I have written you the following lines:

My method is to plough up the ground in the fall of the year, in order to give it the benefit of a winter's frost, and about the first or second week in May I harrow and cross-plough it, then leave it to stand in that condition until seeding time; but if the ground should be stiff and foul I give it more ploughing and harrowing, and scuffle out the weeds, &c. Having the ground thus prepared, when seeding time comes, the land is opened in drills 27 inches apart, by a



method which is novel in this section of the country, and a description of which may, perhaps, be instructive to other farmers. It is thus:—I give my ploughman, (whom I have taken great pains to instruct, and after two years practice he is what may be called a first rate hand,) a rod 54 inches in length, with a notch in the middle, and 20 pieces of split rods, or pieces of laths, for marks, which he sets in the ground at each end of the field, 27 inches apart, by the measured rod, then he starts his plough from No. 1 on the one side of the field to No. 1 on the other side, and back from No. 10 to No. 10 on the other side, until the 10 drills are opened. In opening drills by the above method, half the time and labor is saved. I have known ploughmen with two good horses to open four statute acres per day. The double swingle-tree is 54 inches in length, and, after opening one drill, the right hand horse walks in the furrow, and the plough being fixed on the centre, he cannot err in keeping the proper distance let the field be ever so long. After the drills are opened I begin to haul out the manure. I set as many carts going as will answer the distance from the yard to the field, so that one cart may be in the field putting down manure, and one in the yard filling, and as many on the road as will keep both at work without stoppage, then the whole concern will be moving like clock-work. The manure is put down in every third drill, then follows a man with a dung-fork, who casts the manure on both sides to the adjoining rows, then follow three little boys, spreading the manure in the rows, which must be done with great evenness, and be trod down if it should be long and light; after the manure is put in, the drills are split to cover it. The seed I put in with a single drill, which is attached to the frame of a six inch roller by an iron hook, which can be moved from one side to the other on the head lands. The roller in going flattens the drills before the seed drops, and in returning covers the seed over in a very complete manner. When the plants are up, and are about the size of a bird's egg, I run a scuffler between the rows. The scuffler is made with three shovels; the fore one, which is the centre one, is a duck foot, and the two side ones are bent inward, and the wood-work is constructed that it may be made wider or narrower according to the width of the row. The above scuffler destroys all kinds of weeds, and at the same time takes away the soil from the plants, in order to prepare them for cutting out. After the plants are scuffed the hoers come with cast-steel hoes, and take away all the superfluous plants, and leave only a single one, eight inches apart from plant to plant. In the course of a fortnight or three weeks, if any weeds or grass should show themselves among the plants, the scuffler must be worked twice again, in the place among the rows, which will generally be sufficient for the crop. It is necessary to observe that after the manure is covered the seed must be put in as soon as possible; at all events it must not be delayed until next day, otherwise one third of the crop will be lost.

This is the method I practised last year in raising that beautiful crop which you saw when you visited this place last fall. That crop has

saved me between forty-five and fifty tons of hay, which was sold, packed, for twenty dollars a ton.

The above method I have practised for about twenty years, and never failed to raise a good and profitable crop of turnips. The time I sowed my seed last year was about the middle of July, but I am well aware that if I had sowed them three weeks sooner that the crop would have been much heavier than it was. I intend, if I possibly can, to sow mine this year in the month of June, which, I think, will answer better than at any later period. In hoeing the last time great care must be taken to take away the soil from the plants and leave them as bare as you can; they will thrive much quicker, and come to a much larger size, than if they were partly covered over.

I remain yours most respectfully,  
THOS. BEVAN.

Brookland Woods, April 25, 1836.

### INDIAN CORN

*Made without tillage after planting.*

To the Editor of the Farmer's Register :

By experiments, I have arrived at some conclusions in regard to the culture of Indian corn, which I think are of importance to planters in the southern states. I communicate them for the use of the public with great hesitation, because they are directly at variance with the received opinions on the subject.

The early part of my life was spent in agricultural pursuits—and hence, if there were no other reason, I feel a deep interest in every thing relating to agriculture. I noticed, very early, the great difficulty in transplanting successfully the young corn plants. Whence comes this, but from breaking the roots in taking the plants up? How is it then, that intelligent farmers affirm the doctrine that one chief object in ploughing corn, is to cut its roots? If breaking the roots of young corn in transplanting it, is really fatal to its future growth, must not breaking its roots with the plough, when it is older and the season hotter, be a serious injury to it? Any other conclusion seems to me to be at variance with the general economy of nature. It seems to me that there can be, in truth, but two reasons for ploughing or hoeing corn—1st, to destroy grass and weeds; and 2d, to keep the soil loose, that the roots may penetrate easily, in search of their proper food. But in accomplishing these two purposes, great injury must be done to the corn, by breaking its roots. Can we not accomplish both these ends, and at the same time keep clear of the attendant mischief? I think we can.

Last spring I planted a small piece of poor ground—first breaking it up well. The rows were made three feet apart, and the stalks left about a foot apart in the drill. The ground had been very foul last year with crab grass, whose seed matured. The corn was not well up this spring before the grass began to appear. When the corn had about four or five blades, the young grass completely covered the ground, and the corn was turning yellow. I spread a small quantity of stable manure around the corn, and covered the whole ground three or four inches deep with leaves from the forest, taking care to do this when the ground was wet, and the leaves also,

that they might not be blown away, and to leave the tops of the young corn uncovered. In ten days there was not a particle of living grass to be found, and the corn had put on that deep bluish green which always betokens a healthful condition of the plant.

From the day the corn was planted until after the fodder was pulled and the tops cut, nothing more was done with it, and the result is a product at the rate of *forty-two* bushels to the acre—about one third of the stalk having two ears on each of them.

I noted in the course of the summer, the following facts:—

1st. The corn treated thus, was always ahead of some planted alongside of it, and treated in the usual way.

2d. It ripened at least ten days sooner than other corn, planted at the same time.

3d. During the hottest and driest days the blades never twisted up, as did other corn in the neighborhood.

4th. In the driest weather on removing the leaves the ground was found to be moist to the surface, and loose, as deep as it had been at first broken up.

5th. The heaviest rains had scarcely any effect in washing away the soil or making it hard.

It certainly will require less labor to produce corn in this way, than in the usual mode. And even if it required more we have the consolation to know, that while, by the old mode, every hour's work is an injury to the land, by this mode every hour's work is making the land better; for few things can be better manure than the coating of leaves put on in the summer, when ploughed in the winter or spring following.

I used leaves raked up in the forest, because of these there is an ample supply within the reach of almost every person; and because there seems, from my observation, to be a strong antipathy between dead and decaying forest leaves, and crab grass, that most harassing foe of agriculturists.

I make this communication, as I have already said, with hesitation, because the idea of raising corn without ploughing and hoeing, and at the same time improving the land, protecting it against the influence of a scorching sun and washing rains, is so directly in the teeth of the universal practice for ages. The thing is, however, at least, worthy of further trial. It may lead to most important results. Those who think the plan worth any attention, may easily make an experiment with an acre or two, and note carefully its progress through the summer. If they are satisfied, after the trial, that there is any thing in it, to extend the operation will not be a difficult matter.

If, on experiment, it should be found advisable to extend the operation, the proper way would be, I think, to collect the leaves in winter, and deposit them in heaps on the ground on which they are to be used, and the next spring, during a wet season, after the corn is up, spread them, taking care to leave tops of the young corn uncovered.

There is one very important result that must follow the success of this plan on a large scale—and it was with an eye chiefly to that result, that my experiment was undertaken. The constant

excuse for not improving our land, is, that where cotton is grown, the time necessary, first to cultivate the growing crop properly—next to gather it, and then to prepare for a new crop, leaves the planter no time to collect manure. My plan will put an end to that excuse at once; for wherever leaves are to be had, half the time usually bestowed on working the corn crop in the usual way, spent in gathering leaves and putting them on the ground, instead of ploughing it, may in a short time accomplish every thing that can be desired in the way of manuring.

Why may not the same process answer in the cultivation of cotton? If it keeps the ground soft and moist, and prevents the growth of grass and weeds in a corn crop, it will surely have the same effect with cotton—and be the means, further, of preserving the cotton, when the bolls open, from all the injury it sustains from the soil in wet seasons. This is, however, but speculation. Let it be tested by actual experiment.

JAMES CAMAK.

Athens, Ga. Oct. 10, 1835.

#### POTATOES AND SMYRNA WHEAT.

To the Committee on Agricultural Products, presented for the several premiums offered by the Trustees of the Massachusetts Agricultural Society:

Gentlemen—The field on which Potatoes were grown the present season, was broken up in August, 1834. The soil a deep loam, suitable for grain, (Chesnut land.) Early last spring the field was cross-ploughed, and 18 cords unfermented manure, evenly spread, and deeply ploughed in; sods harrowed down, then furrowed 3 feet apart, and seed placed 18 inches apart in the furrows, and covered 2 inches deep; hoed twice previous to being in the bud. On the 6th October, the vines or tops generally covered the ground, the cutting of them for fodder commenced. These tops, after drying 6 or 8 days, were packed away in the barn with wheat straw sprinkled with salt, say one peck to the ton, and will probably be equal in value to one-half a ton of hay. It is believed, that when hay is as scarce as it is in this vicinity the present season, say worth \$20 per ton, potato tops will more than pay for the expense of cutting and curing them; they are good food for neat cattle. The harvesting the roots was completed October 12th, when, by careful measurement the crop was found to be 515 bushels on the acre. The quantity of seed was 28 bushels; 26 the reds of La Plate, 2 the Roxbury whites.

PAYSON WILLIAMS,  
JACKSON D. WILLIAMS.

Worcester, ss. Oct. 16, 1835.—Then the above named Payson Williams and Jackson D. Williams, made oath that the above statement, by them severally subscribed, is true. Before me,  
EBEN'R. TORREY, J. P.

#### Expenses of Potato Crops.

Breaking up the field,	\$4 00
Carting manure,	5 00
Cross ploughing and ploughing in manure,	6 00
Its proportion of 18 cords manure,	20 00
28 bushels seed at 2s.	9 55

Labor in 2 hoeings,	8 00
Labor in harvesting the crop,	22 00
Labor in cutting and curing the tops,	3 00
	\$77 35

515 bushels at 25c.	\$128 75
Tops,	10 00
	\$138 45 Profit, \$61 42

#### Expenses of Wheat Crop.

2½ bushels seed,	\$4 50
Two ploughings,	5 00
Bushing and rolling,	1 00
Its proportion of manure in 1834,	15 00
Cradling and thrashing and cleaning up,	12 00
	\$37 50
35 bushels, worth,	\$70 00
Straw,	10 00
	\$80 00 Profit, \$42 00

The field on which potatoes were grown in 1834, was well ploughed as early in the following spring as practicable, and 2½ bushels of the Smyrna or Black Sea Wheat was sown, (second week in May, 1836,) ploughed in, bushed, and rolled.

Crop harvested first week in August; thrashed (by horse power) in September, and after being carefully cleaned and measured, was found to be 35 bushels (of 60 lbs. to the bushel,) from the acre.

A much larger crop would have been grown but for the encumbrance of a granite ledge, pervading a considerable part of the field, many rods of which approach within six inches of the surface. The drought of last summer severely pinched the wheat on the ledge.

PAYSON WILLIAMS,  
JACKSON D. WILLIAMS.

Fitchbury, Oct. 15, 1835.

Worcester, ss. Oct. 16, 1835.—Then the above named Payson Williams and Jackson D. Williams, made oath that the foregoing statements, by them severally subscribed, are true. Before me,  
EBEN'R. TORREY, J. P.

I, Philip F. Cowdin, sworn surveyor of the town of Fitchburg, and county of Worcester, have this day measured a certain plat of ground on which potatoes were grown the present season, owned by Payson Williams, of said Fitchburg, and found the same to contain one acre and no more.

Also, one other field on which was grown wheat the present season, owned by said Williams, and found the same to contain one acre and no more.

P. F. COWDIN.

Fitchburg, Oct. 15, 1835.

[From the Farmers' Register.]  
ON TARRING SEED CORN.

King & Queen county,  
February 19th, 1836.

Agriculture is evidently the source of wealth, energy, and support of every country, and in none should it be more regarded as such, than in the United States. Every thing, therefore, which

leads to instruct the farmer should meet with his grateful acceptance, and be looked upon by the community at large as a public good. I have frequently observed premiums granted by the various agricultural associations in our country to those persons who furnished them with the most approved methods of husbandry. I do not propose myself as a candidate for such honors, and yet I hope what I have now to communicate will be as extensively useful to the farming interest as many plans already devised. Almost all the tide-water section of our State is emphatically a corn growing country; hence, whatever course has a tendency to increase its product and lessen the labor of cultivation, must be deemed valuable. As the season for planting this great staple is rapidly approaching, permit me to suggest a few hints as to the excellent mode of preparing the seed corn.

Every farmer is well acquainted with the trouble and perplexity, he is subjected to in replanting his corn, merely on account of crows, black-birds, moles, squirrels, &c., which are ready (after the severities of the winter) to welcome him to the field as their benefactor. No sooner has he planted his field over than he may begin the laborious and disagreeable task. These rioters very frequently, indeed, invariably, by their depredations, cause a great deal of unnecessary labor. This is an evil—and how is it to be remedied? Such a remedy must be of great importance to the farmer especially, and to the public in general. This is what I design to communicate—and it is as follows:—

I have for several years past previous to planting my corn, put it into a vessel, and put thereto as much tar (made thin by warming it a little, and diluting with three parts water) as would thoroughly wet the whole—then taking it out and mixing some plaster or unleached ashes by rolling them well together, which made it ready for planting immediately. This method has prevented the trouble of re-planting—the coat of tar and plaster being a preservative for the grain, and is a nauseous drug to these troublesome genetry, who so often rouse the anger of the farmer to no purpose. This is a method easily practised, and undoubtedly deserves the attention of the farmer.

If this should prove equally useful to such as wish to give it a fair trial, as it has with those who have already made the experiment, the communicator will think himself abundantly rewarded.

HUGH CAMPBELL.

#### DISEASE OF THE HEART IN SHEEP.

A worthy old Ewe, belonging to the flock of E. Wood, Esq. in this town, (Winthrop, Maine,) fell sick a month or two ago, and grew lean and poor. Her owner finding that her death was inevitable, killed her and subjected her as every flock owner should in similar cases, to dissection and examination. The following items of the post obit examination have been obligingly furnished by him. She was quite old, and with lamb—finding that she was sick and failing, he separated her from the rest of the flock and fed her alone, still she grew leaner and more feeble, although her appetite continued, and finally she was killed. Every part of the body and intestines had a healthy appearance. But on the examination of the



heart it was found to be in a dropsical state. The heart case contained more than a gill of watery fluid, and one lobe was found to be weak, flabby, diminished in size, and evidently wasting away. There was no paleness of the eye—the skin had begun to grow pale a little—appetite continued moderately good, and the stomach was full when she was killed. The owner considers the disease a species of the rot, what he calls “misplaced rot,” and states that it is the third case that he has had in his flock in the course of a few years.—*Maine Farmer.*

[From the New England Farmer.]

*Some remarks on Temperature considered in relation to vegetation and the Naturalization of Plants.*

The natural distribution of the vegetable kingdom over the face of the globe, as affected by various causes, and chiefly by the temperature of the different countries and continents, is one of the most interesting of all subjects. As the illustrious Von Humboldt has observed, it is “intimately connected with the physical world in general. Upon the predominance of certain families of plants in particular districts, depend the character of the country and the whole face of nature; and the natural congregation of vast masses of vegetation of the same character in particular countries has produced most important effects upon the social state of the people, the nature of their manners, and the degree of development of the arts of industry.”

The difference of vegetation, as exhibited in the torrid, the temperate, and the frigid zones, is sufficiently familiar to every one. The equinoctial regions, abounding with their splendid vegetation of lofty palms, bread-fruit trees, plantains, and bananas, laden with huge masses of nourishing food, differ as widely from those portions of the earth lying in the temperate zones, where the vine flourishes in perfection, and the cereal grains furnish the chief means of subsistence to man, as the latter does from the arctic regions, where the grasses and cryptogamic plants still keep up the diminishing scale of vegetable life, and contribute to the support of a higher class of organized beings. It is probable that almost every country produces naturally in its vegetation, sufficient means for the subsistence of man; either directly, as in the torrid and temperate regions through the medium of delicious fruits, esculent roots and seeds, or indirectly, as is partially the case in the temperate and frigid divisions through animal life, which primarily subsisted upon vegetation in some of its forms. But man in a civilized state, especially in those countries where climate forbids nature to lavish her bounties in the greatest profusion, has refused to be satisfied with her supplies, and has delighted his taste and gratified his wishes by assembling around him as far as possible, the productions of other countries, either to embellish his habitations, or satisfy his appetites. Hence many plants, which were exotics, have become so acclimatized or naturalized, as to afford the principal food of their inhabitants, and the staple productions of their soils. The vine and fig, which are the boast of France, are not indigenous there. The orange that produces its beautiful golden fruit in

the south of Europe and our own country, is a native of Asia. Some of the commoner grains have followed civilized man in his migrations for such a length of time that it has now become difficult to say which was their native country. This is the case with wheat, millet, and buckwheat, and many other grasses which it is supposed are indigenous in the oriental countries. How much we are indebted to other climates and other countries for our most valuable necessities and luxuries in the vegetable kingdom, a single thought will convince us. Wheat, rye, and most of the other grains, cotton and rice, the staples of our soil have all been imported here; and our most delicious fruits owe their origin to other lands. The peach is from Persia, the apricot from Armenia, the cherry from Pontus, and nearly all our finest cultivated varieties of apples, pears, plums, &c. from Europe.

These preliminary remarks lead us to reflect how much the arts of culture are indebted to the property which many plants have to a certain degree, of becoming naturalized in a country where the variations of temperature differ from those of their own; and it may lead us also to investigate the most successful methods by which such exotics, natives of warmer climates, as may be valuable to us either in an useful or ornamental point of view, may be so naturalized as to be either partially or entirely able to withstand the severity of our northern winters. That a large proportion of the vegetation of the tropics, can never become acclimatized in regions liable to severe frosts, is evident to every one; but that a number of highly valuable plants, natives of peculiar situations in those countries, and more particularly those of the intermediate parallels of latitude, have been, and may be naturalized here, the history of Agriculture and Horticulture affords ample and abundant proof. Plants of rapid and bulky growth, succulent and tender stems, natives of the warmest districts, can never be for a long time exhibited in a state of vegetation here, except in an artificial temperature: But annual plants, and trees, and shrubs, with strong woody stems, particularly if natives of elevated tracts, as the sides of mountains, and the tops of high table lands, may always be considered as affording probabilities of a capacity for naturalization in a colder region.

A method universally known, and which we are inclined to place foremost among the resources for the naturalization of plants, consists in sowing continually the seeds of the plant under trial, for successive generations and from seeds produced in the country into which the plant is introduced. This, though in many cases a lengthy and somewhat tedious process, is, we believe, the same by which the most extensive and valuable naturalizations have been effected heretofore. The more tender fruits, as the peach, cherry, apricot, and almond, have doubtless been rendered hardy in this way; each new generation possessing perhaps diminished vigor, and acquiring a more robust and hardy constitution. Although it would have been difficult, perhaps impossible, to have altered the contexture of the original tree if otherwise continued, (whether by cuttings, suckers, or layers,) yet from reproduction from seed each generation became a little more capable of withstanding the effects of a low tempera-

ture, until the desired result was in a measure, or wholly obtained. It is obvious, however, that the result brought about is not the naturalization of the original species of tree or plant, but, as Professor De Candolle justly observes in his “*Physiologie Végétale*,” of the improved variety produced from seed, and which has acquired in its contexture a diminished susceptibility of cold. The effects produced by this mode of naturalization, are even more abundantly exemplified in the case of herbaceous and annual plants, than among ligneous trees and shrubs. As an instance of this, we may refer to the common Indian corn, which was undoubtedly originally a native of South America and the southern parts of this continent, but of which so many varieties have been produced by cultivation, that it may be said some particular one can be found naturalized and adapted to any parallel of latitude, from the equator to the 45°, and in Europe to the 55° of latitude. \*This is often produced in annual plants, not so much by rendering the plant itself less sensible to cold, for in many cases this is scarcely at all affected, as by producing improved varieties, which shall ripen their seed and come to maturity in a cold climate, in half, or even a fourth of the time necessary for that purpose, in the country where the species is originally a native. Thus the rice, so important an article of food to the natives of the East, was probably first cultivated in Ceylon and Java, whence it spread all over India, Japan, and the southern provinces of China, and the United States. It has also been introduced into Italy, Spain, and the south of France, and we perceive that lately an improved variety has been found sufficiently hardy to produce abundant crops in the comparatively cold climates of Hungary and Westphalia. Rice may now therefore be considered naturalized as far north as 46° in the old world. The luscious fruit of the melon, and the cooling one of the cucumber, can scarcely be brought to maturity if the seeds are direct from the more southern climates where they are natives, but improved varieties have sprung up by culture, so perfectly naturalized as to produce abundant crops in almost every part of the United States. The horticulturist should never therefore reject even an annual plant, which will not come to maturity immediately without artificial aid in our climate, but if the subject is worthy of the pains, he should endeavor by the aid of artificial shelter if necessary, to procure the seed and sow it under the most favorable circumstances during several successive generations, when it will probably at last produce him a variety which will withstand the severity of the climate, or come to maturity sufficiently early to escape the destructive effects of too great an abatement of temperature.† Con-

\*Cobbett's corn, which he brought to maturity in the short and cool summer of England, is, we believe, a very early variety from Canada.

†As a proof of the effects of a renewed reproduction from seed, we may mention that we planted the present season in a favorable situation a quantity of seed of the Lima bean, direct from its native country, latitude 14 degrees S.—the plants produced, however, scarcely attained the period of flowering before they were destroyed by the frost, whilst the plants in their immediate neighborhood, the produce of a variety of the same bean, naturalized in the country, yielded as usual abundant crops of matured seed.

sidered in this light the green-house may become one of the most useful, as well as ornamental and pleasing sources of enjoyment to the experimental horticulturist and the public generally.

We must not leave this part of the subject, without adverting to the advantages which may be obtained by artificial fecundations and impregnations, of highly ornamental or useful exotic plants, with more hardy species or varieties of the same genus; the produce of which may be highly superior varieties, having all the beauty or excellence of the tender species, and perhaps nearly the same robustness of constitution as the hardy one. We conceive it to be a method, by which, now that artificial hybridizing is so well understood, the most valuable results may in many instances be produced in a comparatively short space of time.

The choice of situation and aspect is another important consideration in the naturalization of plants. We never place a plant of a delicate nature in aspects exposed to the utmost inclemencies of the weather—in situations open to the fury of the coldest winds, or the raging of the most boisterous storms. We naturally seek on the contrary to place them in a sheltered situation, in an aspect favorably disposed to catch the genial rays of the sun in summer, and to prolong as much as possible the duration of that favorable season. Hence the use of walls and trellises, and the choice of particular aspects best calculated to favor the object in view. In England, many fruits require a wall, to come to maturity, which ripen perfectly with us as standards, and although walls are as yet but little used here, we can easily imagine that many partially tender trees and shrubs, might be brought to perfection upon them, which the inclemency of our winters forbid us to cultivate in the open air.

Apart from shelters of this description, the character of the soil and situation demands the utmost attention. Soils that are of a cold, clayey and heavy texture, particularly if they retain water, are totally unfit for the growth of tender plants. They should be planted in a light, friable, and porous soil, as dry as the peculiar constitution of the plant will admit, for not only is a wet soil more liable to be deeply frozen, but also the exposed parts of the plants which grow in it. Even hardy and naturalized trees are often severely affected by the cold in a soil saturated with moisture. The philosophy of this is well known to every physiologist. In moist soils, the plant is surcharged with watery fluid, the annual depositions of wood are large, but not firm and well calculated to resist the intensity of cold; the leaves are longer completing their articulations with the stem, and as a consequence of this the young shoots are continued longer in a growing state, and remain succulent and unripened at the approach of winter, when the first severe frost destroys their vitality. Besides these facts, it is well known that water, (and the sap of plants in its primary state is but little more, is a better conductor of heat and cold than either the woody fibre of trees, or the particles of air which occupy, in some measure, the place of a watery fluid in a well ripened branch. Susceptibility to injury by frost in ligneous plants, is therefore increased with the presence of watery fluid, and diminished by the presence of firm well ripened annual lay-

ers of wood. A knowledge of this fact is of the greatest importance to the agriculturist, in the selection of soils and situations for crops which are but imperfectly naturalized. We may illustrate this by remarking, that plantations of the Chinese Mulberry, (*Morus Multicaulis*, a tree that is justly exciting the greatest attention in this country, and which deserves every effort at complete naturalization,) which were situated upon dry gravelly soils, even if in cold aspects, withstood almost perfectly the extreme rigors of the last winter in the eastern states, when extensive fields of the same tree, in moist soils, were entirely cut down to the ground in a great majority of instances.

In Europe the advantages of a dry soil for the naturalization of plants are well known, both theoretically and practically, and many plants that formerly required the protection of a green-house, are by the proper choice of dry and porous soils, inured to the severity of ordinary winters. So well is this subject understood in England and France, that Camellias and Oranges have in favorable situations been quite naturalized. In the latter country it is quite remarkable how many comparatively tender exotics, generally protected in green-houses, are preserved perfectly in large barn-like buildings, without the aid of fire, during the whole winter. "The secret of this," Loudon observes, "lies in the dryness of the air of France, and in the gardener having previously by withholding water, matured the growth of the leaves and ripened the wood; in short, in his having reduced the plants to a dormant state before housing them." In cases where it is desirable that the utmost pains should be taken, as in the case of new and rare shrubs, creepers, &c., the gardener will facilitate the object in view by trenching the soil and artificially producing a subsoil by underlaying the surface mould with a strata of stones or very coarse gravel: thereby checking too vigorous a growth, causing a small but firm annual deposit of wood, and placing the vegetable in a state of rest long before the winter frosts commence.

A variation of this mode of naturalizing, consists in placing many tender kinds of herbaceous plants, and small shrubs upon dry rock-work or aggregations of stones mingled with soil, where they are found to thrive perfectly. We observed in the Botanic Garden at Cambridge, Mass., an *Azalea indica* and a species of *Erica*, that had braved the exceedingly low temperature of nearly 30 deg. [Fah.] below zero, the past winter, having been planted for several years previous in a mass of rock-work, where they had annually matured their wood in the most perfect manner. Those persons who are acquainted with the comparative delicacy of these plants, in a climate so cold as that of Massachusetts, will appreciate at once how thoroughly they had become naturalized by this simple process.

Naturalization by external protection, next deserves our attention. It is a common practice to protect many shrubs and trees with a covering of straw or mats at the approach of winter, during their young state, knowing that as they become stronger and more bulky in size, they will also acquire additional hardihood. This is an effectual practice in its way, and we believe that considered as an auxiliary in naturalization,

some useful hints may be gathered in relation to it from recent discoveries made in the physiology of plants. It was formerly the opinion of some savans, among others Hunter, Schœpf and Salome, that vegetables having a circular system of fluids and a sort of respiration analogous to those of animals, ought to have therefore, and had, a property of developing a certain quantity of caloric or heat within themselves. Recent experiments, however, made by Schutzer and Halder, and more latterly by Dr. Goeppert, of the Botanic Garden of Breslau, seems to have proved, that "vegetables appear to retain a certain medium temperature, which cannot however be considered as originating from heat evolved by the functions of the plant, but can be satisfactorily explained by a reference to the bad conducting power of the vegetable fibre, and the wood by which the temperature of the surrounding aerial strata, penetrate but slowly into the interior of the plant." What we would wish to deduce directly from this, is, that many woody plants on which it is proposed to try acclimatizing experiments by external protection, might in many instances with more chance of success, be reared under shelter until they attained considerable thickness of stem and induration of wood, when they would from their increased non-conducting capacity, be much better able to withstand the cold, if protected a few seasons, than the same species, if reared from infancy in the open air. As an illustration of the advantages which size and diameter of stem give to tender trees in withstanding rigorous cold, we may mention that we saw in the nurseries at Philadelphia, the following trees, viz: *Acacia julibrissin*, *Pinckneya pubens*, *Magnolia grandiflora*, and *G. elliptica*, *Gordonia pubescens*, &c., of some twenty or more years growth, that had survived uninjured during the past winter, (unparalleled for depression of temperature for fifty years past,) the extraordinary low temperature of 12 deg. or more below the zero of Fah., or 44 deg. below the freezing point.—That this was owing in a great measure to their having become naturalized in that locality, there can be no doubt. But the ordinary lowest temperature of Philadelphia is some 20 or 25 deg. above that of the last winter, and we conceived that these trees survived so perfectly the increase of cold only by virtue of their large size, thickness of bark and wood, and the consequent thickness of non-conducting substance, to protect the juices of the plant and vital organs from the effects of frost.

The simplest and perhaps most effectual method of preserving plants by external protection, is to be found in the well known practice of enveloping either the whole or a portion of the stem and branches with covering of dry straw, pieces of Russia matting, or moss and hay, firmly bound with straw ropes. For small plants, boxes or empty casks, with a light in the top, (or which is preferable, in the north side,) are often used.—The branches of evergreen trees, as the pine, hemlock and spruce, where they can be procured, are excellent materials for this purpose. It is, we believe, customary in some parts of France where the fig is extensively cultivated, to bend the branches down to the earth every autumn and cover them with a thin layer of soil: in this



way the fig, though a tender tree, can be cultivated to a great extent in the northern districts.

We strongly suspect after all that has been said of protection externally, against the influence of cold, that the evil effects which plants suffer, arise not so much from the *congelation* of the exposed parts of vegetables, as the *rapid and hasty thawing* to which they are often exposed in this climate by the sudden influence of the sun after continued cold. Who has not witnessed some tender tree on the north side of a wall, some few herbaceous plants in the shade of a hedge or fence, or even the grass in the northern exposure, preserving their greenness and vitality through the chilly season of winter, when their equally tender neighbors exposed to the sun, have suffered severely, and even perish entirely? The cause of all this is, probably, that the sudden glancing of the warm sun upon frozen branches, leaves or roots of the tender vegetable, *causes a sudden dilation in the crystals of ice*, that are formed in those parts, which, consequently, in their expansion distend and rupture the spiral vessels, and other parts filled with semi-fluid matter, and destroys those organs of the plant necessary to its vitality; in short, something takes place analogous in its effects to the bursting of the blood-vessels in the animal system. This is very striking in the splitting of the stems of large trees that occasionally happens in cold climates, and is often attended with a loud noise.

In all northern countries where the earth receives an annual coating of snow, the husbandman is well aware how beneficial to his fields is the protecting mantle of nature—so much so that in this country it is a common saying among farmers, that a covering of snow is equal in its beneficial effects to a coat of manure. The benefits in many cases are not exaggerated, for the snow not only prevents the loss of the internal heat of the earth by radiation and thus protects vegetation upon its surface, but has also a powerful influence in shielding the exposed parts of plants from the alternations of freezing and thawing, and the injury they would receive from the sudden action of the sun when in a frozen state. The results are not less beneficial upon a small scale to the horticulturist, while it affords him also a hint of the efficacy of slight coverings over plants near the surface of the earth, as in this manner many of the herbaceous and stemless plants of the south may be preserved in security during our winters. We should not forget to mention in this brief essay, the idea first put in practice we think by the enlightened M. Soulangue Rodin, of the horticultural institute near Paris, of attempting naturalization by grafting partially tender species of plants, upon hardy species of the same or a kindred genus, able to withstand the effects of cold. The success of his experiments at the time the results were made known was flattering. His method was to graft upon large robust stalks, at some considerable distance from the ground, availing himself thereby of the protecting properties of the stalk, and of the power which he conceived it to possess of maintaining its temperature, by the communication which its deep roots had with the warmer soil. We believe this mode of naturalization might be very effectual south of the Potomac, where the soil is never very deeply frozen, in acclimating trees and shrubs of

still warmer climates, and we recommend it to the attention of the horticulturist in all cases where practicable in this region.

It is proper to remark here, that persons about to make experiments in naturalizing plants, should when they choose a locality endeavor to avoid all low valleys, especially if abounding with springs or streams of water, as the most unfavorable of all situations for the attainment of the object in view, on account of their being more subject to early and late frosts in autumn and spring, and to intense congelation in the depths of winter. Extensive slopes, however, by the sides of large rivers and other bodies of water, are excellent sites for the purpose. Some of our large inland lakes, those immense bodies of water which are rarely frozen over, have an astonishing influence in ameliorating the severity of the winters in their neighborhoods, and many tender plants might be naturalized in their vicinity, and thus become adapted through their progeny to much colder situations.

Such are the principal facts already known, which should claim the attention of all persons whom pleasure or interest may induce to attempt the naturalization of plants in this country. Although it is a practice which has hitherto proceeded nearly at random, and has been rather the amusement of the amateur cultivator, than an object of careful attention, we are persuaded that with a portion of the assiduity directed toward it that the other branches of horticultural science have received, it may become the means not only of a great increase of gratification to the horticulturist, in the acquisition which the garden receive of beautiful and valuable flowering trees, shrubs and vegetables, but also that it may to a certain degree be productive of very considerable advantages to the agriculture of our country. The United States embrace almost every desirable variety of climate, and we believe that in time the greater majority of useful and beautiful productions of the vegetable kingdom, may be successfully produced in our own territory. We confidently anticipate the period when the vine and the silk culture shall be carried to maturity in the extreme northern portions of our country, as the olive, the cocoa, palm, the plantain and banana, the cochineal-cactus, and even the tea plant, will in time, undoubtedly, flourish in perfection in the southern portions of it. With so extensive a range of climates, the field for experiments is equally extensive; varieties of the different productions may be originated, suitable for numerous localities and latitudes; and soils and situations may be chosen best adapted to the naturalization and cultivation of the different plants. Nature has already furnished us with the most extensive variety of vegetation, to be found in any temperate region, and it is only necessary for art to second her intentions and our country may boast of all that is most delightful and gratifying to man among the products of the soil.

In the meantime we look to our horticultural and agricultural societies, composed as they are of the learned, scientific and practical portion of the community who are devoted to these subjects, for the increase and dissemination of information relating to them—for the report of such experiments and facts as have already been made

and ascertained, and the encouragement of new and more extensive trials and experiments in the different sections, soils and climates of our fertile and highly diversified country.

A. J. DOWNING.

Botanic Garden and Nursery,  
Newburgh, N. Y., Dec. 10th, 1835.

[Communication.]

TO THE PUBLIC.

The present may be truly called an age of improvement, the expansion of science, and its application to the useful, as well as mechanical arts, has imparted an Economy to the works of labor, in almost every department, of valuable import, and enduring utility. Knowledge has been denominated power in every age, and the genius and inventions of our Franklin and Fulton, have clearly demonstrated it to the present, and I trust succeeding ages. The subscriber in giving to the public an outline of his humble, but he hopes useful and beneficial invention, invokes no improper comparisons, but merely endeavors to contribute his might to the accumulated knowledge of the country. His invention is an improvement in the construction of furnaces by which heat may be increased or decreased at pleasure, regulated and concentrated to any fixed purpose, for which he has obtained a Patent. This invention is appropriately applicable to Lime burners, Brick makers, Potters, Smelters, and Founders where wood or Bituminous coal is used as an agent to generate heat. The utility and economy of this invention is, that if wood be used as an agent it will be charred into coal—if bituminous coal be used or applied, Coal will result—which, in either case, will be a saving of nearly the original price of the wood or coal. In cities, large towns, or their vicinities, where fuel is an article of some consideration, this invention will prove of primary importance, and the more especially, as charcoal and stone coal are in great and increasing demand for various and useful purposes. By this invention the expense and waste of wood will be saved in making charcoal. By it the use of bituminous coal no ashes will arise to injure lime. By actual experiment in testing this invention, it has been satisfactorily proven, that anthracite coal answers a valuable purpose. A further description of this very economical and useful invention is deemed unnecessary here; those disposed to purchase state, county or single rights, will please apply to the subscriber (if by letter post paid) Union Mills, Frederick county, Maryland.

N. B. Prices for state, or county, or single rights will be moderate.

JOHN OWINGS.

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#### GAME CHICKENS.

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## BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY.

	PER.	FROM	TO
BEANS, white field,.....	bushel.	1 75	—
CATTLE, on the hoof,.....	100lbs.	8 00	9 00
CORN, yellow,.....	bushel.	80	81
White,.....	"	—	75
COTTON, Virginia,.....	pound.	—	—
North Carolina,.....	"	—	—
Upland,.....	"	18 1/2	20
FEATHERS,.....	pound.	50	—
FLAXSEED,.....	bushel.	1 50	—
Flour & Meal—Best wh. wh't fam.	barrel.	7 75	8 25
Do. do. baker's.....	"	7 50	8 00
Do. do. Superfine,.....	"	6 75	6 81
SuperHow. st. in good de'd	"	6 75	—
Do. wagon price,.....	"	6 75	—
City Mills, extra,.....	"	—	7 00
Do. do. do. do. do. do. do.	"	6 62	—
Susquehanna,.....	"	6 62	—
Rye,.....	"	5 00	—
Kilm-dried Meal, in hhds.	hhd.	—	20 00
do. in bbls.	bbl.	—	4 50
GRASS SEEDS, red Clover,.....	bushel.	5 25	—
Timothy (herds of the north)	"	2 50	3 00
Orchard,.....	"	2 75	3 25
Tall meadow Oat,.....	"	2 25	2 75
Herds, or red top,.....	"	87	1 25
HAY, in bulk,.....	ton.	18 00	—
HEMP, country, dew rotted,.....	pound.	6	7
Do. water rotted,.....	"	7	8
Hops, on the hoof,.....	100lb.	—	9 50
Slaughtered,.....	"	—	—
Hops—first sort,.....	pound.	16	—
second,.....	"	14	—
refuse,.....	"	12	—
LIME,.....	bushel.	33	35
MUSTARD SEED, Domestic,.....	"	—	—
OATS,.....	"	44	47
PEAS, red eye,.....	bushel.	—	—
Black eye,.....	"	—	1 12
Lady,.....	"	—	—
PLASTER PARIS, in the stone,.....	ton.	4 00	4 25
Ground,.....	barrel.	1 50	—
PALMA CHRISTA BEAN,.....	bushel.	—	—
RAGS,.....	pound.	5	4
RYE,.....	bushel.	95	97
Susquehanna,.....	"	—	97
TOBACCO, crop, common,.....	100 lbs	4 75	5 00
brown and red,.....	"	5 00	7 00
fine red,.....	"	7 00	9 00
wrappery, suitable	"	—	—
for segars,.....	"	5 00	10 00
yellow and red,.....	"	6 00	8 00
good yellow,.....	"	8 00	12 00
fine yellow,.....	"	12 00	16 00
Seconds, as in quality, ..	"	4 75	5 00
ground leaf,.....	"	5 00	8 00
Virginia,.....	"	7 00	14 00
Rappahannock,.....	"	—	—
Kentucky,.....	"	8 00	14 00
WHEAT, white,.....	bushel.	1 38	1 40
Red,.....	"	1 30	1 38
WHISKY, 1st pf. in bbls.....	gallon.	36	37
in hhds.....	"	35 1/2	—
wagon price,.....	"	34	—
WAGON FREIGHTS, to Pittsburgh,	100 lbs	2 25	—
To Wheeling,.....	"	3 00	—
WOOL, Prime & Saxon Fleeces,...	teashed. un towa	55 to 68	30 32
Full Merino,.....	"	48 55	28 30
Three fourths Merino,.....	"	45 48	26 28
One half do.....	"	40 45	24 26
Common & one fourth Mem.	"	36 40	22 24
Palled,.....	"	38 40	23 24

A HERD OF DURHAM STOCK  
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THE entire herd of the late Dr. Hosack, at Hyde Park, New York, 7 1/2 miles above Poughkeepsie, will be sold on the 20th of May, by auction.

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## BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,.....	barrel.	—	—
BACON, hams, new, Balt. cured....	pound.	15	17
Shoulders,..... do.....	"	12	—
Middlings,..... do.....	"	13	14
Assorted, country,.....	"	13	13 1/2
BUTTER, printed, in lbs. & half lbs.	"	25	31
Roll,.....	"	20	22
CIDER,.....	barrel.	—	—
CALVES, three to six weeks old....	each.	4 50	6 00
Cows, new milch,.....	"	20 00	45 00
Dry,.....	"	9 00	12 00
CORN MEAL, for family use,.....	100lbs.	—	1 87
CHOP RYE,.....	"	—	1 87
EGGS,.....	dozen.	—	12
FISH, Shad, No. 1, Susquehanna,.....	barrel.	8 00	—
No. 2,.....	"	6 75	—
Herrings, salted, No. 1,.....	"	3 50	—
Mackerel, No. 2, 9 25;—No. 3.....	"	—	6 50
Cod, salted,.....	cwt.	3 00	3 25
LARD,.....	pound.	15	—

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may 10 Light near Pratt st. wharf.

PUBLIC SALE OF IMPROVED DURHAM  
SHORT HORN CATTLE.

THE subscriber will offer for sale in Wilmington, Del. on Saturday, the 21st day of May, his STOCK of improved DURHAM SHORT HORNS, consisting of 6 BULLS from 1 to 2 years old, 8 COWS, and 5 HEIFERS. Sale to commence at 10 o'clock, A. M.  
may 10 SAMUEL CANBY.

## FARMERS' REPOSITORY.

No. 36 W. Pratt-street, Baltimore, Jan. 25, 1836.  
THE proprietor avails himself again of the commencement of a New Year, to express his grateful thanks to his numerous friends and customers for their kind and liberal support of his Agricultural Establishment, and is happy to say that his ceaseless exertions to accommodate the public, have not been without a corresponding encouragement from them, and with his present Improvements and Machinery, he is able to manufacture his Agricultural Implements much better than formerly, and with greater facility, and hopes to merit continued patronage. He now presents to the public an article new in its construction, for grinding corn and cob for feeding horses and stock. To those who approve this mode of feeding, this machine is worthy their attention. Also, Corn Shellers to be worked by hand or horse-power. He has a variety of Straw Cutters; but his own patented Cylindrical Straw Cutter is not surpassed by any other, implement of the kind in existence; he has recently made some improvements in their construction, which adds to their cost, and for which he has been obliged to add a trifling advance on the price of the small size—his prices for them being as follows, viz:

11 inch Revolving Bottoms \$30, with extra pair of knives.	\$33
11 " Permanent Bottom 28, do do do	31
13 " Permanent Bottom 43, do do do	48
13 " Revolving Bottom 45, do do do	50
15 " Revolving Bottom 50, do do do	56
20 " Large size fitted for horse-power 80, do do	90

This variety of Ploughs embraces almost every description and size that are worthy of notice, from a small seed Plough to the large rail road Plough—Gideon Davis' Improved Ploughs in all their variety, with cast and wrought shares; these castings are now made on his own premises, of the best stock and with special care; a supply of them always on hand to sell separate from the ploughs when required. Ox Scrapers for levelling hills, &c.; common and patent Wheat Fans; Fox & Borland's spring concave Threshing Machines, large and small size, and portable horse powers for the latter; also one of Z. Booth's 2 horse Threshing Machines and stationary horse power for the same; Brown's vertical patent Wool Spinners, and Watson's patent Washing Machine, both very simple and useful machines for families; Harrows; double and single corn and tobacco Cultivators; superior grain Cradles; and a great variety of other farming implements of a prime quality, and all on reasonable terms, at wholesale and retail.  
Likewise in store—Orchard Grass, Timothy, and Herd Grass Seed of superior quality.  
mh 22—an2m JONATHAN S. EASTMAN.

AGRICULTURAL IMPLEMENTS, GRASS  
SEEDS, &c.

JAMES MOORE, successor of Sinclair & Moore, Light street near Pratt, tenders his thanks to the agricultural community, for the liberal patronage heretofore afforded to the Maryland Agricultural Repository, and respectfully invites the attention of farmers and others, to his stock of articles now on hand, comprising a large assortment of PLOUGHS of the most approved patterns, both wrought and cast shears, and of sizes adapted to all the purposes of agriculture—also Hill side and double mould board ploughs.

Corn cultivators of different kinds, those with five wrought tines generally preferred: Harrows of different shapes and sizes.

Corn shellers, the usefulness of which has been fully attested, and the increased sales of the last year, together with the many impressions of their utility, by those who use them, give evidence of their excellence—price \$20. Subject to a discount of 5 per cent for cash payment.—Price from \$15 to \$30. Improved Wheat Fans, of different sizes.

Cylindrical Straw cutters, a superior article for cutting any kind of long forage, 20 inch boxes adapted to horse power, \$75—extra knives per set \$6. 14 inch box adapted to manual power \$45—extra knives \$5 per set. 11 inch box which has some recent improvements \$30—extra knives, \$3 per set. Common dutch straw cutters from \$5 to \$7 50.

Garden and Field Tools, such as spades, shovels, hedge shears, mattocks, grubbing hoes, pruning tools, and hoes in a variety of forms, &c. Cast steel axes, warranted, Wove wire for screens, fans, cellar windows, safes, &c. Cotton Gins made to order—Grain Cradles—Harvest tools in their season.

Machines for sowing clover seed, which distribute the seed with regularity over a space of 12 feet at a time.

Having an Iron Foundry attached to this establishment extra castings for ploughs of all kinds, Threshing machines, Horse powers, Mill work, window weights, &c. can be furnished or made to order of the best quality and at moderate prices.

## FIELD SEEDS.

Orchard grass, Herds grass, Tall meadow oat grass—Timothy and Clover; also on hand a lot of Rufflo oats—Buckwheat, Millet, Potato Oats, &c.

Retail sales mostly confined to town acceptances, or to cash for which a discount will be made on implements.

## GAMA GRASS ROOTS.

5000 Gama Grass Roots, just received. Price \$2 per 100. This grass still retains its high character for soiling and great products. Also in store, a few pounds of GAMA GRASS SEED. Price \$6 per pound or 50c. per ounce. And will be for sale in a few days, 1300 Double Dahlia FLOWER ROOTS, embracing all the finest and most rare sorts—Price 50 a 75 cents, \$1, 1 50 a \$2 each. A liberal discount will be made when one dozen or more are taken.

R. SINCLAIR, Jr.  
ap 26 Light, near Pratt st. wharf.